



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638
 Phone: (562) 404-4474 * Fax: (562) 404-1773
 ssdi@ssdi-power.com * www.ssdi-power.com

**SUM20UF & UFSMS
 thru
 SUM50UF & UFSMS**

Designer's Data Sheet

Part Number / Ordering Information^{1/}

SUM _ UF _ _

L Screening^{2/} _ = Not Screened
 TX = TX Level
 TXV = TXV Level
 S = S Level

L Package
 _ = Axial
 SMS = Surface Mount Square Tab

L Recovery Time
 UF = Ultra Fast

L Voltage
 20 = 2000 V
 25 = 2500 V
 30 = 3000 V
 35 = 3500 V
 40 = 4000 V
 50 = 5000 V

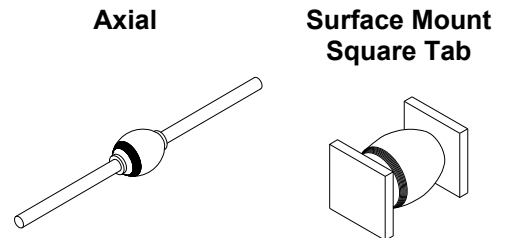
**0.4 AMP
 2000-5000 VOLTS
 60 nsec
 HIGH VOLTAGE
 ULTRA FAST RECTIFIER**

- FEATURES:**
- Fast Recovery: 60 nsec Maximum
 - PIV to 5000 Volts
 - Hermetically Sealed Axial and Surface Mount Package
 - Void-Free Construction
 - Metallurgically Bonded
 - 175°C Maximum Operating Temperature
 - TX, TXV, and Space Level Screening Available^{2/}

ELECTRICAL CHARACTERISTICS

Part Number	Peak Inverse Voltage	Average Rectifier Current		Maximum Reverse Current		Maximum Forward Voltage	Maximum Surge Current (1 Cycle)	Maximum Reverse Recovery Time	Maximum Junction Capacitance	Typical Thermal Impedance
Symbol	PIV	I ₀		I _R		V _F	I _{FSM}	t _{RR}	C _J	θ _{JL} /θ _{JE}
Units	Volts	mA		µA		Volts	Amps	nsec	pF	°C/W
Conditions		25°C	100°C	25°C	100°C	25°C	25°C	25°C	VR = 100V fT = 1MHZ	L = 3/8"
SUM20UF	2000	400	250	1.0	25	10	25	60	10	16
SUM25UF	2500	400	250	1.0	25	10	25	60	10	16
SUM30UF	3000	400	250	1.0	25	13	25	60	10	16
SUM35UF	3500	400	250	1.0	25	13	25	60	10	16
SUM40UF	4000	400	250	1.0	25	13	25	60	10	16
SUM50UF	5000	400	250	1.0	25	13	25	60	10	16

1/ For ordering information, price, and availability – contact factory.
 2/ Screening based on MIL-PRF-19500. Screening flows available on request.
 3/ Operating and testing over 10,000 V/inch may require encapsulation or immersion in a suitable dielectric material.
 4/ Max. forward voltage measured with instantaneous forward pulse of 300µsec minimum.
 5/ Max. Lead/End Tab temp. for soldering is 250°C, 3/8" from case for 5 sec maximum.
 6/ Operating and storage temperature: -65°C to +175°C.
 7/ Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=25mA, TA=25°C.



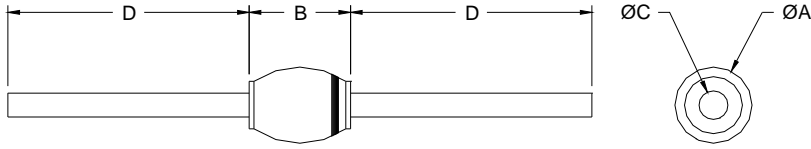


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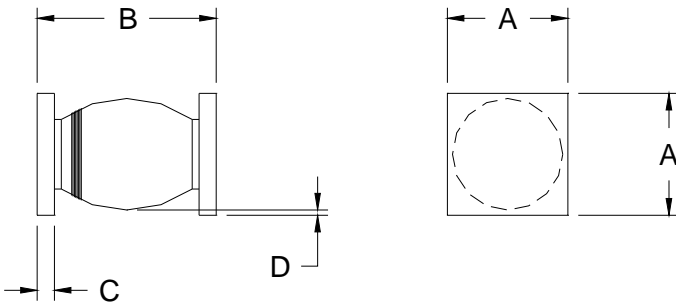
**SUM20UF & UFSMS
thru
SUM50UF & UFSMS**

PACKAGE OUTLINE: Axial



DIMENSIONS		
DIM	MIN	MAX
A	0.065"	0.165"
B	---	0.300"
C	0.047"	0.053"
D	1.00"	—

PACKAGE OUTLINE: Surface Mount Square Tab



DIMENSIONS		
DIM	MIN	MAX
A	0.170"	0.180"
B	0.285"	0.325"
C	0.020"	0.030"
D	0.002"	—

Notes:
Consult manufacturing for operating curves.